

TABLE OF CONTENTS

CHAPTER 19.12 LANDSCAPE, WALL AND BUFFER REQUIREMENTS

19.12.010 APPLICABILITY	1
19.12.020 INTENT OF DEVELOPMENT STANDARDS.....	1
19.12.030 GENERAL.....	1
A. Landscape Required	1
B. Additional Landscaping May Be Required	2
C. Alternative Landscape Designs	2
D. Maintenance	2
E. Installation of Required Landscaping	2
F. Irrigation of Landscaping	2
G. Turf Limitations	3
H. Perimeter	4
I. Plants and Shrubs	4
J. Ground Covers	4
19.12.040 PARKING LOT LANDSCAPING.....	4
A. Landscape Islands	4
B. Planting Requirement	5
C. Parking Lot Screening	5
19.12.050 STREETSCAPE BUFFERING	5
A. Streetscape Buffer Zone	5
B. Penetration of Streetscape Buffer Zone	5
C. Clustering of Plant Material	6
D. Utility Boxes and Installations	6
E. Sidewalks	6
F. Street Trees	7

19.12.060 ADDITIONAL BUFFERING REQUIREMENTS.....	9
A. Landscape Buffer Zone.	9
B. Clustering of Plant Material	9
C. Wall Design Standard	10
19.12.070 LANDSCAPE PLAN APPROVAL PROCEDURE	10
19.12.080 ENFORCEMENT AND PENALTIES	10
19.12.090 MINIMUM LANDSCAPING REQUIREMENTS ON MULTI-FAMILY DEVELOPMENT.....	10

Ord 5509 9/18/02

CHAPTER 19.12 LANDSCAPE WALL AND BUFFER REQUIREMENTS

19.12.010 APPLICABILITY

This chapter applies to all multi-family, office, retail, commercial, institutional, and industrial developments. In addition, it applies to all single family developments with five or more lots adjacent to streets classified as collectors or larger. However, it does not apply to any special purpose zoning district which contains special landscape standards or to properties in the Downtown Overlay District.

19.12.020 INTENT OF DEVELOPMENT STANDARDS

The intent of establishing minimum standards for landscaping, walls and buffering is:

- A. To ensure that new development will contribute to the overall attractiveness of the City;
- B. To increase design compatibility between residential and abutting commercial and industrial land uses;
- C. To reinforce a sense of community and preserve the integrity of neighborhoods;
- D. To conserve water and reduce erosion;
- E. To reduce unsightly views;
- F. To reduce heat and glare generated by development; and
- G. To aid in filtering dust and particulate matter from the air.

19.12.030 GENERAL

A. Landscape Required

1. All required Site Development Plans shall meet or exceed the minimum standards, and shall comply with any restrictions, established in this chapter. In addition, the City's policy document entitled "Landscape, Wall and Buffer Standards" is a resource for acceptable standards and design solutions. To the extent that such document establishes minimum requirements and standards and is formally adopted by the City Council, a Site Development Plan must comply with that document.
2. Landscape and irrigation plans may be combined on the same drawing with required Site Development Plans.

3. All landscape and irrigation plans shall be prepared and stamped by a registered Architect, Landscape Architect, Residential Designer or Civil Engineer.
4. The owner, developer and occupant of the property are jointly and severally responsible for maintaining or assuring the ongoing maintenance of installed landscaping so that the landscaping continues to thrive. Prior to the issuance of a building permit, the owner, developer or contractor shall post a performance bond or equivalent security to assure the performance of the maintenance obligation for a minimum of two years.

B. Additional Landscaping May Be Required

Additional landscaping may be required by the Director, or reviewing authority, in order to respond to special site features, maintain an established landscape pattern created by existing landscaping in the surrounding area, or mitigate the impact of a particular development.

C. Alternative Landscape Designs

The Director, or other reviewing authority, may approve variations to the standards and designs set out in this chapter if they respond more appropriately to a particular site and provide equivalent means of achieving the intent of this chapter.

D. Maintenance

Property owners shall maintain all walls in good structural and finish condition. All landscaping shall be maintained in a healthy and vigorous living condition. Dead vegetation shall be promptly replaced, in accordance with standard seasonal planting practices, with healthy, living plants.

E. Installation of Required Landscaping

All required perimeter landscaping shall be installed with the first phase of construction when adjacent to or across the street from existing residential uses, or as soon as permitted by standard seasonal planting practices.

F. Irrigation of Landscaping

All required landscaping shall be installed with an irrigation system designed to eliminate any run-off of water into the public rights-of-way.

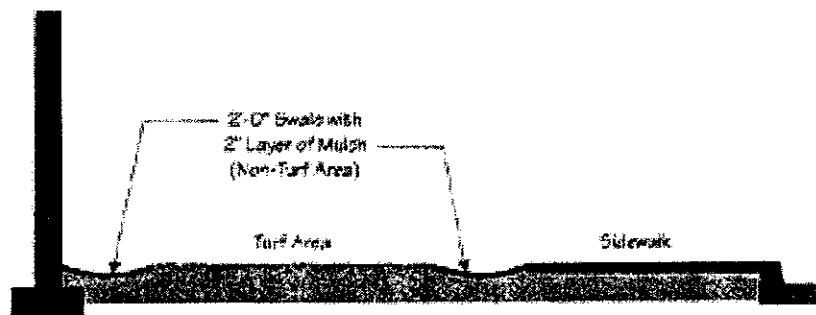
In order to minimize damage to buildings and solid walls from soil settling, expansion/contraction (cracked foundation), all overhead spray irrigation systems shall be a minimum of twenty-four (24) inches back from any building and solid walls with no overspray contacting any building or solid walls.

An automatic irrigation system is required for all planting areas, and shall include:

1. An electric automatic controller with multiple program capabilities;
2. Multiple repeat cycle capabilities; and
3. A flexible calendar program.

All irrigation water shall be retained on-site. When required, swales shall channel water to larger holding areas, catch basins, other planting areas, gravel sumps and/or dry-wells. Areas that accumulate system water shall be provided with underground drainage systems to carry water to holding or discharge areas. Nuisance flows shall not spill over the sidewalk and into any street (see Figure 1).

FIGURE 1 LANDSCAPE AREA SWALE



G. Turf Limitations

1. The use of turf shall be limited as follows:

<u>Zoning District/Use</u>	<u>Use of Turf</u>
Commercial/Industrial Districts	Limited to a maximum of 25% of total landscapable area
Public Facilities Districts	Prohibited, except for schools, parks and cemeteries
Golf Course Use	Limited to 5 acres average per hole, with a maximum 10 additional acres for driving range.
Residential Districts (Single-Family)	Limited to a maximum of 50% of total front yard area
Residential Districts (Multi-Family)	Limited to a maximum of 30% of total landscapable area

2. The turf limitations contained in this Subsection are intended to increase the use of water efficient vegetation. Landscaping shall be designed, and the landscaping materials shall be chosen and installed, so as to ensure that, within 3 years of normal growth, at least 50% of the area covered by non-turf landscaping will consist of water efficient vegetation.
3. The maximum amount of turf allowable pursuant to Paragraph (1) may be increased proportionally by the percentage of water used for irrigation that comes from a source to which the property owner has secured water rights.

H. Perimeter

Perimeter landscaping shall be provided and shall include drought-resistant and water efficient plant materials consistent with the Southern Nevada Water Authority xeriscape guidelines and the turf limitations of Subsection (G). The width of perimeter landscape areas shall conform to the requirements as found in the "*Landscape, Wall and Buffer Standards*" policy document.

I. Plants and Shrubs

Plants or shrubs are required and shall include a minimum of four shrubs of five-gallon minimum each, and four shrubs of one-gallon minimum each, per each 24-inch box and 15-gallon tree provided.

J. Ground Covers

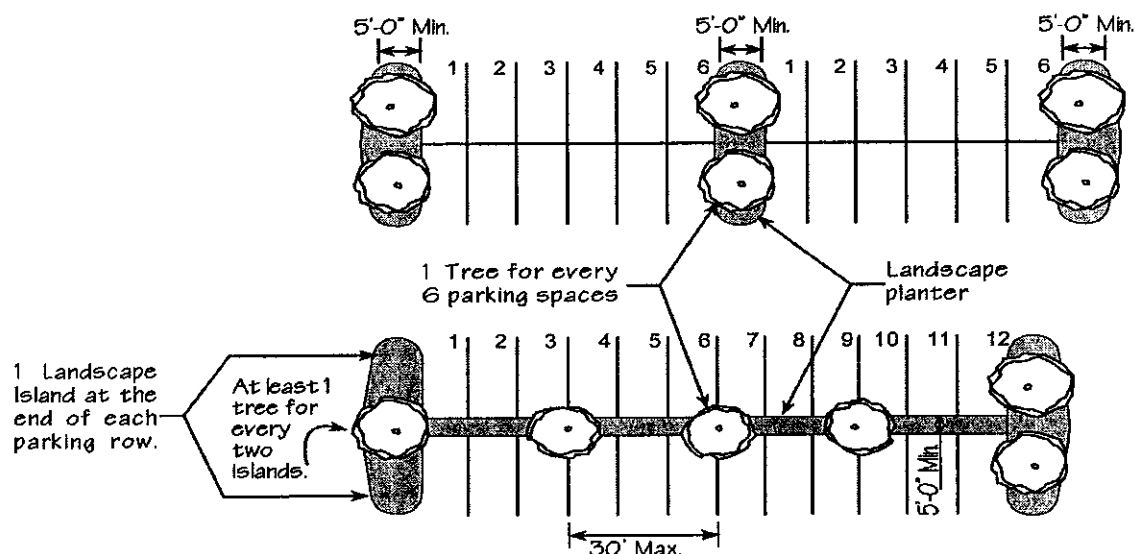
Ground covers shall be installed in all landscaped areas. Non-vegetative ground covers shall include, but not be limited to, rocks and small stones, crushed rock, and bark installed to a minimum depth of two inches in all areas.

19.12.040 Parking Lot Landscaping

A. Landscape Islands

In accordance with Figure 2 below:

1. Landscape islands located within the parking area shall have a minimum planter width of five feet and a minimum length equal to the length of the adjacent parking space. Landscape islands may be located between rows of parking, between individual parking spaces, or at the end of a row of parking spaces.
2. Landscape islands must be located at the end of each row of parking spaces.
3. The required trees shall be distributed throughout the parking area in an aesthetically pleasing manner in order to break up unlandscaped areas of the parking lot.
4. Landscape islands and any other required landscape areas shall be irrigated with drip irrigation only.

FIGURE 2 LANDSCAPE PLANTING ALTERNATIVES**B. Planting Requirement**

The minimum acceptable size plant material for landscaped islands shall be 24-inch box evergreen or deciduous shade trees. These trees shall be provided at a ratio of one tree for every six spaces provided.

C. Parking Lot Screening

Parking lots shall be screened from adjacent roadways by a low wall, maximum 30 inches tall, by a solid living hedge approximately 36 inches tall, or some other method approved as part of the landscape plan.

19.12.050 Streetscape Buffering**A. Streetscape Buffer Zone**

A streetscape buffer zone consisting of landscape planting and screening shall be provided adjacent to all street rights-of-way identified in Section 19.12.010 in accordance with any requirements of the Landscape, Wall and Buffer Standards, as adopted by the City.

B. Penetration of Streetscape Buffer Zone

The streetscape buffer zone is in addition to any sidewalk, but the buffer zone may be penetrated by driveways and sidewalks approximately perpendicular to the street right-of-way.

C. Clustering of Plant Material

The clustering of plant material into groups of three or more plants is encouraged.

D. Utility Boxes and Installations

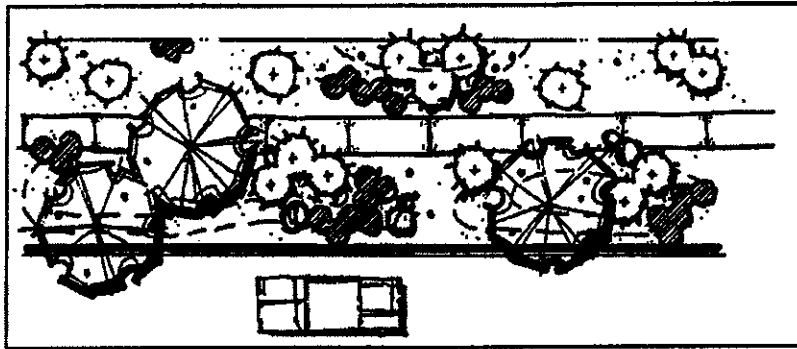
1. Along streets that border residential subdivision, all utility boxes and above-ground utility installations, other than utility poles, that are in excess of 27 cubic feet in size and that are to be placed back of sidewalk shall be installed with landscaping on three sides. The landscaping must include tall grasses and shrubbery which, at maturity, will provide adequate screening of the utility structures.
2. Along streets that border nonresidential development, all utility boxes and above-ground utility installations, other than utility poles, that are in excess of 27 cubic feet in size (excluding pad and concrete collars) shall be set back a sufficient distance so that a minimum of 3 feet of landscaping separates the utility structure from the public street right-of-way or sidewalk, whichever is nearer the structures. The landscaping must include tall grasses and shrubbery which, at maturity, will provide adequate screening of the utility structures. In addition, all utility boxes shall be placed so that the access doors open parallel to the street corridor and are accessible without the need to cut down or reduce the effectiveness of the landscaped screening.
3. Within proposed trail corridors that are identified in the Master Plan Transportation Trails Element and the Master Plan Recreation Trails Element, no utility box or aboveground utility installation, other than a utility pole, that is in excess of 27 cubic feet in size (excluding pad and concrete collars) shall be allowed. In addition, all utility boxes to be placed immediately adjacent to a trail corridor shall be placed so that the access doors open parallel to the trail corridor and are accessible without the need to cut down or reduce the effectiveness of the landscaping within the trail area.

E. Sidewalks

Sidewalks a minimum of five feet in width are required. Sidewalks along arterial streets 100 feet and wider shall be separated from the back of the street curb by a minimum of five feet of landscaped buffer area (Figure 3). The buffer area shall be planted with low maintenance, drought tolerant materials. Trees may be planted within the buffer area but are not required. Street trees shall be planted in accordance with Section 19.12.050.F. The developer shall provide preliminary peripheral landscaping plans at the time of application. Maintenance of the peripheral landscaping and sidewalk shall be the responsibility of the property owner, developer, business association, other similar organization, or other method as approved by the City. If necessary, a pedestrian walkway easement for any sidewalk area which will fall on private property, and/or an encroachment agreement for landscaping and private improvements in the right-of-way will be required.

1. In areas where the street flow depth of stormwater exceeds the top of the curb elevation, required erosion control measures such as stem or rockery walls, riprap, turf, etc. shall be integrated into the landscape design. Where stem or rockery walls are used the wall shall be backfilled level with the top of the wall and landscaping installed. Color and texture of such walls shall be consistent with the sidewalk, hardscaped areas or perimeter walls. All walls shall be capped with a wall cap.

FIGURE 3 LANDSCAPE PERIMETER



Landscaped perimeter tracts with sidewalks that are separated from the street by landscaping provide an enhanced pedestrian environment and street edge.

F. Street Trees

Street trees, of an approved type, shall be planted along public streets in accordance with any corridor or specific area plan as adopted by the City. In the absence of any such adopted plan the following requirements shall apply.

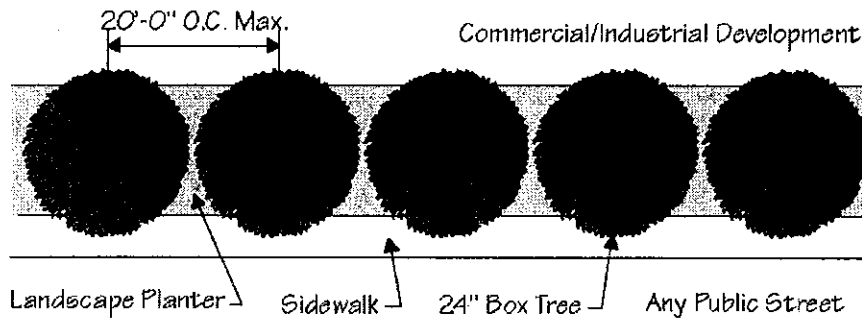
Minimum number of trees required:

The planter shall provide a minimum of one 24 inch box (minimum 1 1/2" caliper measured 6" above the soil line) deciduous or evergreen tree, or palm tree with minimum height of 15 feet from the ground to the top of the fronds, for every twenty linear feet of planter, plus one additional similar size tree to provide coverage at the end of planters.

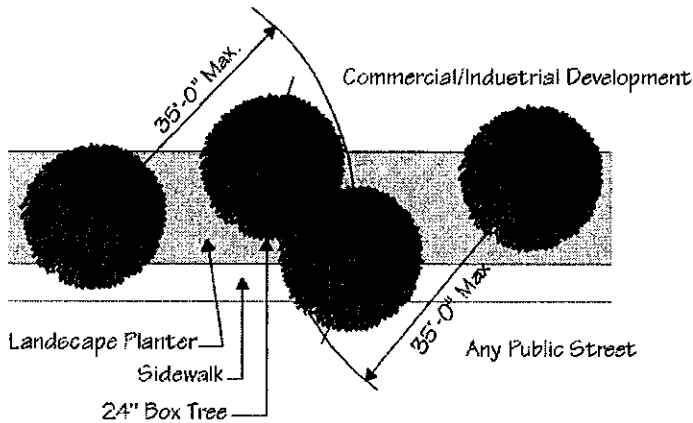
Tree spacing alternatives:

Alternative 1 (See Figure 4)

Spacing of trees shall not exceed twenty feet on center (O.C.)

FIGURE 4**Alternative 2 (See Figure 5)**

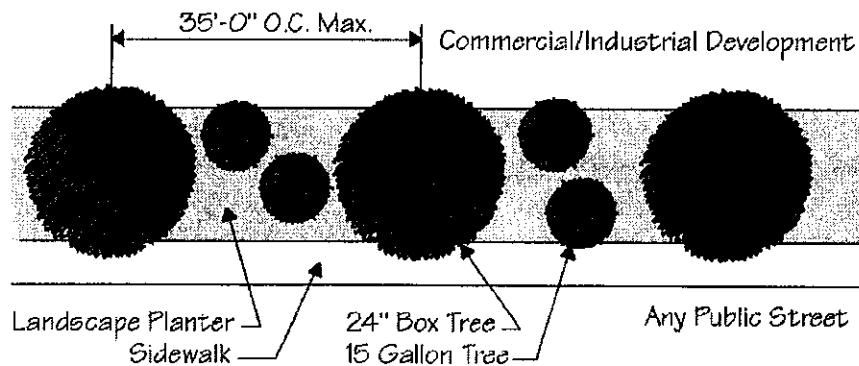
Clustering of trees is allowed if: the total number of trees exceeds the minimum requirements by at least one tree; the spacing between any two trees does not exceed thirty-five feet; and at least three trees are located within a thirty-five foot radius.

FIGURE 5**Alternative 3 (See Figure 6)**

The minimum number of trees required is one 24 inch box deciduous tree, evergreen tree, or 15 foot palm tree for every forty linear feet of planter plus one extra tree of similar size to provide coverage at the ends of planters. In addition, two 15 gallon deciduous trees, evergreen trees or palm trees shall be required for every forty linear feet of planter, and will be located between every 24 inch box tree or 15 foot palm tree.

The spacing of the 24-inch box trees or 15' palm trees shall not exceed thirty-five feet on center. The 15-gallon trees can be either regularly spaced or grouped in between the larger trees.

FIGURE 6



19.12.060 Additional Buffering Requirements

A. Landscape Buffer Zone

In addition to any required perimeter wall a landscape buffer zone and screening wall shall be constructed and maintained on all multi-family, commercial and industrial properties to provide a buffer from adjacent properties in accordance with Table 1.

1. Deciduous trees must be of a variety that reaches a minimum height of 15' at maturity.
2. Evergreen trees shall be a minimum of 8 feet in height at the time of planting and be of a variety that will grow to a minimum height of 15 feet at maturity. Palm trees are not acceptable for screening in this application.

Table 1 Landscape Buffering

STANDARD	MULTI-FAMILY	COMMERCIAL	INDUSTRIAL
Minimum Zone Depth	6 feet	8 feet	8 feet
Minimum Trees (24" Box) 1 1/2" caliper measured 6" above soil line	1 per 30 linear feet	1 per 20 linear feet ¹	1 per 30 linear feet ¹
		1 per 30 linear feet ²	1 per 30 linear feet ²
Wall Height	6 feet	8 feet	8 feet

¹ Where adjacent to any residential use(s)

² Where adjacent to any commercial or industrial use(s)

B. Clustering of Plant Material

The clustering of plant material into groups of three or more plants is encouraged.

C. Wall Design Standard

All walls required under this subchapter and which are not located within 25 feet of a street right-of-way may be made of any solid masonry material, including concrete block, stucco, brick or stone.

19.12.070 Landscape Plan Approval Procedure

Unless approved in connection with a Rezoning, Special Use Permit or Variance application, landscape plans shall be processed and approved, if appropriate, as part of the Site Development Plan approval procedure

19.12.080 Enforcement and Penalties

In addition to any other remedy which might be available, the City may withhold, deny, revoke or suspend a business license, certificate of occupancy or other permit or approval for failure to comply with this Chapter.

19.12.090 Minimum Landscaping Requirement on Multi-Family Developments

Ord 5579 3/5/03

- (A) Multi-family developments that were approved before the minimum landscaping requirements of this Chapter went into effect may be required to comply with those requirements, within a reasonable time and to the extent reasonably possible. Upon notice from the Department of Neighborhood Services, and within the time period specified in the notice, the owner or manager of a development shall submit to the Planning and Development Department a proposed landscaping plan. The submittal shall be subject to the approval of the Director. If a proposed landscaping plan is denied, the owner or manager may appeal the denial to the Planning Commission.
- (B) Upon approval of a landscaping plan, the owner and manager of the development shall be jointly and severally responsible for maintaining the approved landscaping in accordance with this Chapter.